

SERVICE BULLETIN

Classification:

EL18-018a

Reference:

Date:

September 11, 2018

2011-2015 LEAF; 12 VOLT BATTERY LOSES CHARGE AND/OR TELEMATICS SERVICES DO NOT WORK

NTB18-045a

This bulletin has been amended. The CLAIMS INFORMATION section has been revised. No other changes have been made. Please discard previous versions of this bulletin.

APPLIED VEHICLES:2011-2015 LEAF (ZE0)**APPLIED SYSTEM:**Vehicles equipped with a 3G Telematics control unit

IF YOU CONFIRM

The 12 volt battery continuously loses its charge,

and/or

Remote Telematics services do not work.

NOTE: DTCs P3131 (SYSTEM SHUTOFF ERROR) and/or P31C2 (TCU) may be found stored.

ACTION

- 1. Refer to step 2 on page 2 of the SERVICE PROCEDURE to confirm this bulletin applies to the vehicle being worked on.
- 2. If this bulletin applies, reprogram the Telematics control unit (TCU).

IMPORTANT: The purpose of ACTION (above) is to give you a quick idea of the work you will be performing. You MUST closely follow the <u>entire</u> SERVICE PROCEDURE as it contains information that is essential to successfully completing this repair.

Nissan Bulletins are intended for use by qualified technicians, not 'do-it-yourselfers'. Qualified technicians are properly trained individuals who have the equipment, tools, safety instruction, and know-how to do a job properly and safely. NOTE: If you believe that a described condition may apply to a particular vehicle, DO NOT assume that it does. See your Nissan dealer to determine if this applies to your vehicle.

SERVICE PROCEDURE

This SERVICE PROCEDURE contains two (2) sections:

Section 1 – Check the TCU Part Number (this page)

Section 2 – **TCU Reprogramming (includes turning the TCU OFF and ON)** (next page)

Check the TCU Part Number

- 1. With CONSULT-III plus (C-III plus), go to **Diagnosis (One System) > System** Selection > TELEMATICS > ECU identification.
- 2. When you get to the screen shown in Figure 1, confirm this bulletin applies as follows.
 - A. Find the TCU **Part Number** and write it on the repair order. **NOTE:** This is the <u>current</u> TCU Part Number (P/N).

Back Home Print Screen Screen Capture Mose	Recorded Provest Provide Contraction Contr
	2A: ► 283B0- XXX Current TCU P/N
TCUID	XXXXXXXXXXXXX
SIM ID	X90XX20226X30X00X396X
TCU PHONE NUMBER	
V.I.N	00000000000000
	111

Figure 1

- B. Compare the P/N you wrote down to the numbers in the **Current TCU Part Number** column in **Table A** below.
 - If there is a <u>match</u>, this bulletin applies. Go to **TCU Reprogramming (includes turning the TCU OFF and ON)** on the next page.
 - If there is <u>not a match</u>, <u>this bulletin does not apply</u>. Refer to ASIST for further diagnostic and repair information.

Table A	
---------	--

MODEL	CURRENT TCU PART NUMBER: 283B0-
LEAF	3NA1A, 3NA2A, 3NF2A

TCU Reprogramming (includes turning the TCU OFF and ON)

IMPORTANT: Before starting, make sure:

- ASIST on the CONSULT PC has been synchronized (updated) to the current date.
- All C-III plus software updates (if any) have been installed.
- The CONSULT PC is connected to the Internet (Wi-Fi or cable).

Turn OFF the TCU

- 1. Connect the plus VI to the vehicle.
 - Make sure to use the correct VI for C-III plus (plus VI).

CAUTION: Make sure the plus VI is securely connected. If the plus VI connection is loose during reprogramming, the process may be interrupted and the **TCU may be damaged.**

2. Connect the AC Adapter to the CONSULT PC.

CAUTION: Be sure to connect the AC Adapter. If the CONSULT PC battery voltage drops during reprogramming, the process may be interrupted and the **TCU may be damaged**.

3. Turn OFF all external Bluetooth[®] devices (e.g., cell phones, printers, etc.) within range of the CONSULT PC and the plus VI.

CAUTION: Make sure to turn OFF all external Bluetooth[®] devices. If Bluetooth[®] signal waves are within range of the CONSULT PC and the plus VI during reprogramming, reprogramming may be interrupted and the **TCU may be damaged**.

- 4. Put the vehicle in "Ready" mode.
 - The high voltage system will maintain the 12 volt battery.

CAUTION : Make sure the battery voltage stays between <u>12.0 and 15.5 volts</u> during reprogramming. If the battery voltage goes out of this range during reprogramming, the **TCU may be damaged**.

5. Turn OFF all vehicle electrical loads such as exterior lights, interior lights, HVAC, blower, rear defogger, audio, NAVI, seat heater, steering wheel heater, etc.

IMPORTANT: Make sure to turn OFF all vehicle electrical loads. Make sure the battery voltage stays between <u>12.0 and 15.5 volts</u> during reprogramming. If the battery voltage goes out of this range during reprogramming, the **TCU may be damaged**.

- 6. Turn ON the CONSULT PC.
- 7. Select (open) C-III plus.
- 8. Wait for the plus VI to be recognized.
 - The serial number (Serial No.) will display when the plus VI is recognized.

	Connee	ction Status		Diagnosis Menu
		Serial No.	Status	Diagnosis (One System)
ecognized	VI	2300727	Derive (Mireless connection	Diagnosis (All Systems)
	м	•	No connection	Re/programming, Configuration
	00	Select VI/M	L .	Immobilizer
		tion Setting Sub mode	ABC Language Setting	Maintenance
	69	VDR		

9. Select Diagnosis (One System).

onneo	ction Status		Diagnosis Menu
	Serial No.	Status	Diagnosis (One System)
VI	2300727	Normal Mode/Wireless connection	Diagnosis (All Systems)
ML	•	No connection	Re/programming, Configuration
8	Select VI/MI	le le	Immobilizer
-	tion Setting Sub mode	ABC Language Setting	Maintenance

Figure 3

10. Select Telematics.

AUTO BACK DOOR	nault	VI MI
All systen	ns 🔻	
	r i	
AUTO BACK DOOR	TOTAL ILLUM C/U	TEL EMATICO
	· · · · · · · · · · · · · · · · · · ·	TELEMATICS
Diag Data Recorder	OCCUPANT DETECTION	
4WAS(FRONT)	BRAKE	Step
E-SUS	SIDE RADAR LEFT	
SONAR	MULTI DISPLAY	SMART ENTRANCE
ACCELE PEDAL ACT	SIDE RADAR RIGHT	AIR LEVELIZER
HV BATTERY	CHARGER	REARVIEW CAMERA
		2/3
	E-SUS SONAR CCCELE PEDAL ACT HV BATTERY	E-SUS SIDE RADAR LEFT SONAR MULTI DISPLAY ACCELE PEDAL ACT SIDE RADAR RIGHT

Figure 4

11. Select Work Support.

CONSULT-III plus Ver.	VIN:-	Vehicle : -		Country : U.S.A.
Back Home Print Screen	Screen Measureme Rec	orded Help 13.		🔀
System)	n Selection TELEMATIC	S		
Self Diagnostic E Data Mo	work support	ECU identification		
No DTC is detected. Further testing may be requir	red	-	+	
	Step			
	11			
				Print
				Save
17-100955		1/1		ERASE

Figure 5

12. Select (highlight) **TCU ACTIVATE SETTING**.

CONSULT-III plus Ver. VIN:	Vehicle : -	Country : U.S.A.
Back Home Print Screen Canture	Measureme nt Mode Data	
Diagnosis (One System) System Selection	TELEMATICS	
Self Diagnostic E Data Monitor	Work support	
Test Item		
SAVE VIN DATA		
CENTER CONNECTION SETTING		
TCU ACTIVATE SETTING	Step 12	
WRITE VIN DATA		
WRITE VIN DATA (MANUAL)		
		1.
	1/1	Start
17/100500		

Figure 6

13. Select Start.

CONSULT-III plus Ver.	VIN:-	Vehicle : -	Country : U.S.A.
Back Home Print Screen	Screen Capture Mode	Recorded Data	
Diagnosis (One System) Sy	stem Selection 🕨 TELEM	ATICS	
Work support : TCU ACTIVATE S	ETTING		
Change TCU activate setting.			no
		5	Step on 13
Current status		Waiting for yo	our operation Start
			End
TP100961			

Figure 7

14. Select OFF.

15. Select **END**, and then wait 40 seconds.

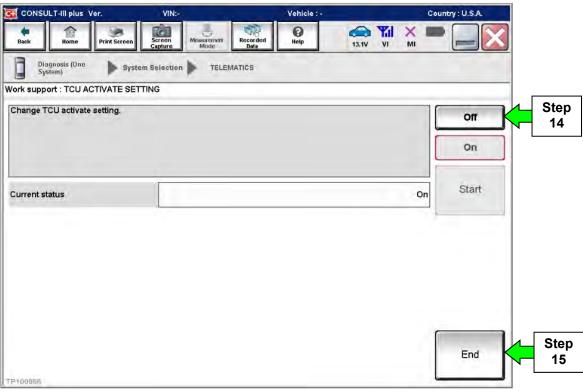


Figure 8

16. Select Home, and then go to the next page.

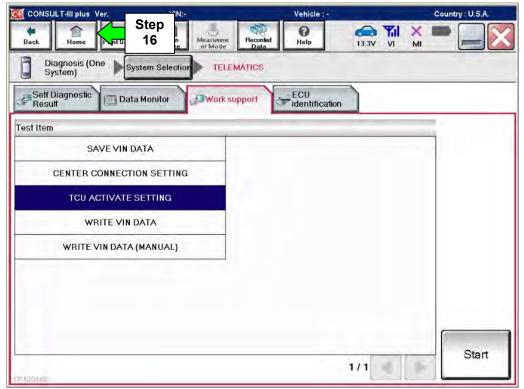


Figure 9

TCU Reprogramming

1. Select **Re/programming, Configuration**.

a compo	er-in plaat rei					Tennale .		Croa	in y . o . o . o . o		
de Back	Home	Print Screen	Screen Capture	Messurement Mode	Recorded Data	() Help	11.8V VI	× ===			
Connee	ction Statu	IS			D	iagnosis N	Menu	_	-		
	Serial No.		Sta	atus		Diag	gnosis (One s	System)			
VI	2300727			de/Wireless ection		Diag	gnosis (All S	ystems)			
MI	-		No con	nection		(y)	programming		uration	」] ←	Step 1
00	Select VI					imm	obilizer		-]	
	tion Setting Sub mode	6	ABC	guage Settin		Mai	ntenance				
39	VDR			-							
						10					

Figure 10

2. Use the arrows (if needed) to view and read all precautions, check the **Confirmed instructions** box, and then select **Next**.

Re/programming, Configuration		Precaut	on Vehicle	Selection	
recaution					
		ramming and C/U config e "Confirm" check box af		points. And	
Precautions					
Caution: 1. Follow the operation (2. "Back" and "Home" I	button may not be used				
-For reprogramming and		us sortware, reprogrammi	ng/programming dat	a to this	
CONSULT-III plus PC.		eprogramming procedure	sheet.	-1.52	
1. Install the latest versio CONSULT-III plus PC. 2. Preparation and read -For ECU Configuration 1. Need to write the com	the service manual or n figuration data to new E				
Install the latest version CONSULT-III plus PC. Preparation and read For ECU Configuration Need to write the con If writing the wrong co -For ECU Configuration 1. Confirm the vehicle's a configuration data, ECU	the service manual or n figuration data to new E onfiguration data, ECU o using manual mode spec and its configuratio can not work. Please w	CU, after replace it. an not work. Please write n spec, following the ser rite the right data.	the right data.	and a start of the	Step 2
. Install the latest version ONSULT-III plus PC. . Preparation and read or ECU Configuration . Need to write the cond . If writing the wrong condition or ECU Configuration . Confirm the vehicle's a . onfiguration data, ECU	the service manual or n figuration data to new E onfiguration data, ECU o using manual mode spec and its configuratio	CU, after replace it. an not work. Please write n spec, following the ser rite the right data.	the right data.	and a start of the	· · ·

Figure 11

3. Select Automatic Selection(VIN).

• If the screen in Figure 12 does not display, skip to step 4.

Re/programmi Configuratio	ng,	Precaution	Vehicle Selection	Vehicle Confirmat	tion
Automatic S	election(VIN)	Manual Sele	ction(Vehicle Name)		
Vehicle Name :		0.		Model Year :	Sales Channe
"MURANO Camp:P8201	JUKE	QUEST			NISS
350Z					INFIN
370Z					
370Z Convertible		Exa	mple		
370Z Convertible AL TIMA		Exa	mple		
		Exa	mple		
ALTIMA		Exa	mple		
ALTIMA ALTIMA Hybrid	PATHFINDER	Exan xterra	mple		CLEA
ALTIMA ALTIMA Hybrid ARMADA	PATHFINDER PATHFINDER ARMADA	I EI ION SERBI	mple		CLEA

Figure 12

4. If the **VIN or Chassis #** matches the vehicle's VIN, select **Confirm**.

C Configuration	velocie Selection Vehicle Confirmation	
/IN or Chassis #	RUIARRUKKKKKKK	1
ehicle Name :	LEAF	
lodel Year	X2808XX	
	1/1	
		Change
	Step	[

Figure 13

5. Select Confirm.

Back Home P	int Screen Capture Mode Recorded Date Help CAR VI MI MI
Re/programming, Configuration	Vehicle Confirmation Input VIN 4/4
Input VIN	
CONSULT, VIN number s	ion, in case of specified operation that requires to save ECU information into you input is saved as file name. Therefore, confirm VIN number correctly.
VIN (17 or 18 digits)	SOKDANEX MUX XOX BOOK
	Step 5 Confirm

Figure 14

6. Select **TELEMATICS**.

Back Home Print Screen	Screen Capture	Recorded Data			
Re/programming, Configuration	Input VIN	System Selecti	on Operation	Selection	5/6
System Selection					
Touch "system". In case ECU you want to operate is	not listed below, the ve	ehicle or model yea	r might be selected	wrong.	
ICC/ADAS					
TELEMATICS		ep 6			
HVAC					
AVM					
TRANSMISSION					
-	_				
				2/	

Figure 15

7. Select Reprogramming.

	Re/programming, Configuration	System Selection Operation Selection	6/
	Operation Selection		
	Touch "Operation". In case over write current ECU, touch In case replacement of ECU, select an o		
	REPROGRAMMING	In case you want to reprogramming ECU	touch "Reprogramming"
ер 🗖			
	Reprogramming		
	Reprogramming Replacement OF ECU Programming (Blank ECU)		
	Replacement OF ECU	After ECU Replacement	Touch "Before ECU Replacement", Operation log with part number is saved to CONSULT.
	Replacement OF ECU Programming (Blank ECU) Before ECU	After ECU Replacement	Operation log with part number is saved

Figure 16

8. Select Save.

Configuration	Operation Selection Save ECU Data	70
ave ECU Data		<u> </u>
	and the current part number as listed below to CONSULT. peration by selecting suitable operation log. Operation log is erased ed.	
ile Label	50X VACED WHENDRIN R YOM R	1
Operation	REPROGRAMMING	
	REPROGRAMMING	_
System		Step
System Part Number	TELEMATICS	Step 8
Operation System Part Number Vehicle	TELEMATICS 283B0-XXXXX	

Figure 17

9. Use the arrows (if needed) to view and read all precautions, check the Confirmed Instructions box, and then select Next.

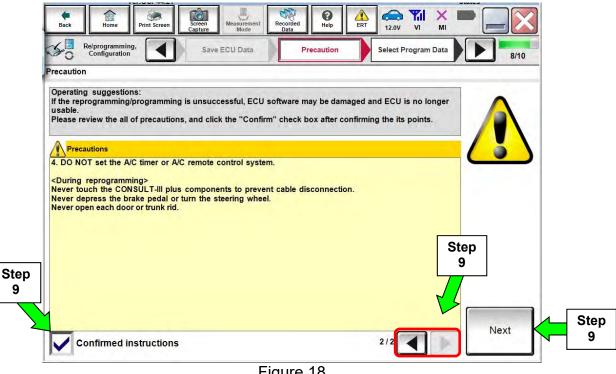


Figure 18

10. Verify the Current Part Number and Part Number After Reprogramming are different, and then select Next.

Back Home Print Screen Capture Me	anumment Recorded	MI
Re/programming, Configuration	tion Select Program Data Confirm Vehicle Condition	9/10
elect Program Data		
vehicle.	g data is NOT displayed, only one data is available for t wrong, touch "Re-select", and confirm the vehicle	his
art Number After Repro/programming	292X36K91228XX	
urrent Part Number	283B0-xxxxxx	
ehicle	LEAF ZE0	
'IN		
System		
Other Information	XIRIXDAX#XDFX XEX X	Re-select
Expected time to finish re/programming	25min	St St
		Next 1

Figure 19

11. Verify **OK** is highlighted **green** (battery voltage must be between **12.0 and 15.5 volts**), and then select Next.

IMPORTANT: Battery voltage must stay between **12.0 and 15.5 volts** during reprogramming. If not, reprogramming may be interrupted and the TCU may be damaged.

Reiprogramming. Configuration Select Program Data Confirm Vehicle Condition 10/10 Operate according to the following procedures. Monitor battery voltage here 1 Remove the terminal caps of battery, and connect battery charger to battery. 2 Adjust the battery charger output so that the vehicle battery voltage is between 12.0V and 13.5V. The vehicle battery voltage is shown on the top-right of this screen 3 Confirm the RESULT is OK, touch "Next".	Back Home Print Screen Screen Kode Recorded Help E	
Operate according to the following procedures. Monitor battery voltage here 1 Remove the terminal caps of battery, and connect battery charger to battery. 2 Adjust the battery charger output so that the vehicle battery voltage is between 12.0V and 13.5V. The vehicle battery voltage is shown on the top-right of this screen 3 Step 1 1		10/10
1 2 Adjust the battery charger output so that the vehicle battery voltage is between 12.0V and 13.8V. The vehicle battery voltage is shown on the top-right of this screen. 3 Confirm the RESULT is OK, touch "Next".	Confirm Vehicle Condition	
Remove the terminal caps of battery, and connect battery charger to battery. 2 Adjust the battery charger output so that the vehicle battery voltage is between 12.0V and 13.5V. The vehicle battery voltage is shown on the top-right of this screen 3 Confirm the RESULT is OK, touch "Next".	Operate according to the following procedures.	
Adjust the battery charger output so that the vehicle battery voltage is between 12.0V and 13.5V. The vehicle battery voltage is shown on the top-right of this screen		
Confirm the RESULT is OK, touch "Next".	Adjust the battery charger output so that the vehicle battery voltage is between 12.0V 13.5V. The vehicle battery voltage is shown on the top-right of this screen.	and
	3	
	Result OK	Next Step 11

Figure 20

12. Verify all items listed under Confirm Vehicle Condition are OK, and then select Start.

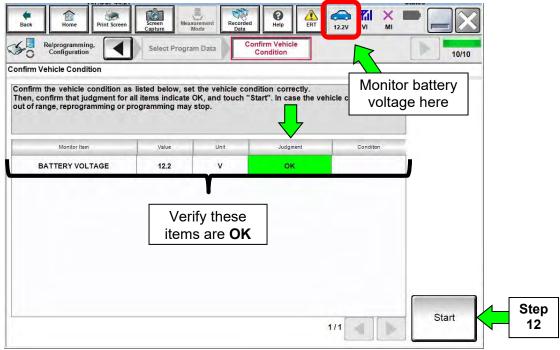
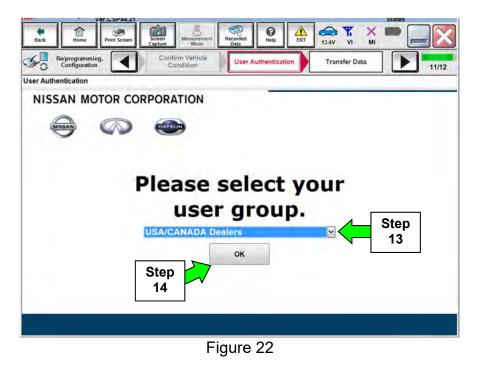


Figure 21

13. Select USA/CANADA Dealers.

14. Select OK.



NOTE:

- The above screen may not display if the CONSULT PC has remained ON since the last reprogramming.
- If the CONSULT PC is not connected to the Internet, the screen in Figure 23 will display.

Offline operation screen	A REAL PROPERTY AND A REAL	ingen
Offline menu		
Touch the required operation.		
Internet connection	Connect to the internet.	
Manual input	Enter manually.	
Home	Back to Home screen.	

Figure 23

NOTE:

- Before reprogramming will start, you will be required to enter your **Username** and **Password**.
- The CONSULT PC must be connected to the Internet (Wi-Fi or cable).
- If you do not know your **Username** and **Password**, contact your service manager.

15. Start the reprogramming process by selecting **Submit**.

Back	Home	Print Screen	Screen Capture	asurement Mode	Recorded Data	() Help	ERT	12.1V		× =		\mathbf{X}
50	Re/programmin Configuration	g,	Confirm V Condit		User Au	thenticatio	on	Trans	fer Data			11/12
User Auth	hentication											_
6	S) factor											Î
D	aimler WS	5										
	ſ	then	Please ente Username: Password:	r your UserID be	low.		Er info	nter lo ormati	ogin on]		E
		select Submit	Subm	nit								
	Restart Login									S PO	wered by REAUTH	

Figure 24

16. The progress bar (Figure 25) should go to approximately 10%, and then the error message in Figure 26 should appear. This is normal.

NOTE: If a different error message displays, go to **Electronic Control Unit Recovery** on the next page.

Back Home	Print Screen Capture	Measurement Mode	d Pelp ERT	12.1V VI	
Re/programming, Configuration	User Au	uthentication	Transfer Data		12/12
Transfer Data					
Transfer data to VI DO NOT disconnect VI.	Please wait for compl	ete to transfer to VI.			
Estimated Time Transfer CONSULT to VI	25min				30%
Transfer VI to ECU					0%
Step 16		•		.0	0
		Figure	e 25		

- 17. When the screen in Figure 26 displays, verify the following, and then select **Retry**.
 - Check battery voltage (12.0–15.5 volts).
 - Ignition is ON, engine OFF.
 - External Bluetooth[®] devices are OFF.
 - All electrical loads are OFF.
 - Select <u>Retry</u> and follow the on screen instructions.
 - <u>"Retry" may not go</u> <u>through on the first</u> <u>attempt and can be</u> <u>selected more than</u> <u>once</u>.

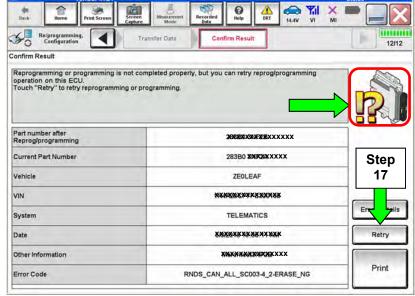


Figure 26

Electronic Control Unit Recovery

Do not disconnect the plus VI or shut down C-III plus if reprogramming does not complete.

If reprogramming does <u>not</u> complete and the "X" icon displays as shown in Figure 27:

- Check battery voltage (12.0 15.5 volts).
- CONSULT A/C adapter is plugged in.
- Ignition is ON, engine OFF.
- Transmission is in Park.
- All C-III plus / VI cables are securely connected.
- All C-III plus updates are installed.
- Select <u>Home</u>, and restart the reprogram procedure from the beginning.

CONSULT-LI BUS WY V	IN Vehicle (CABHOA)	County Hapen
a conte por caster	Meta second Regarded Help Corport	
onfirm Rosult		2 1 19
Remogramming a rol completed property Print this screen as needed. Confirm CDNS with procedure. Restart CONSULT with disconnecting Vion	ULT version. IGM/Power switch position, shift position se, and start the reprogramming again	ard etc
Part manifer after Reprog/programming	XXXXXXXXX	_
	283B0-xxxxxx	
Current part number	20300-2204	
	XXXXXXXXXX	
Vetrcle		
Verscle	XXXXXXXXX	
Valsale VIN System		
Current part number Velsete VIIN System Trete Information	XXXXXXXXXX XXXXXXXXXXXX TELEMATICS	

Figure 27

18. Select Next.

Here Back	Home	Print Screen	Screen Capture	Measurement Mode	Recorded Data	O Help	ERT	12.1V	Yil	×	
50	Re/programmin Configuration	g,	Trans	sfer Data	Con	firm Resul	t				13/13
Confirm	Result										
Touch	ramming or p "Next" to conti		is complete	eu.		0					
								:	Step 18		Next

Figure 28

- 19. Erase all DTCs as follows:
 - a. Turn the ignition OFF.

	Screen apture Mode Recorde Data	d ed Help	12.2V VI MI	
Re/programming, Configuration	Confirm Result	Erase All DTCs	Print Result / Operation Complete	14/15
Erase All DTCs				
According to the instruction below, en	ase All DTCs.			
1 Turn ignition switch / power switch t	to the OFF position.		CON	OFF
Current status of ignition switch	ON			Step 19a

Figure 29

- b. Turn the ignition ON.
- c. Wait for DTC erase to complete, and then select **Next**.

Back Home Print Screen	Screen Measurement Mode	orded Help	12.2V VI M	
Re/programming, Configuration	Confirm Result	Erase All DTCs	Print Result / Operation Complete	• 14/15
Erase All DTCs				
According to the instruction below, en	ase All DTCs.			
1 Turn ignition switch to the ON posit	ion, then All DTCs are autor	natically erased.		
			(Con	XE CONTE
			10	
			OF	F ON
Current status of ignition	OFF			
switch	OFF			
If the current status of ignition s	witch displayed on the so	reen differs from the st	atus of	
the actual vehicle ignition switch				Step 19b
				190
			Step	
			19c	Next

Figure 30

- 20. When the entire reprogramming process is complete, the screen in Figure 31 will display.
- 21. Verify the before and after part numbers are different.
- 22. Print a copy of this screen (Figure 31) and attach it to the repair order for warranty documentation.
- 23. Select **Confirm**.

Back Home Print Screen	Screen Apture Mode Recorded Data ERT 12.20	
Re/programming, Configuration	Erase All DTCs Print Result / Operation Complete	15/15
Print Result / Operation Complete		
In case CONSULT can NOT immediat		
Reprog/programming	Step	
Part number before Reprog/programming	21 283B0-xxxxx	
Vehicle	ZE0 LEAF	
VIN	SAN AZZMARAN BANAK	Step 22 Print
System	TELEMATICS	
Date	2/87/2879/874870674111×	Other Operation
	1/1	Step 23 Confirm

Figure 31

Go to the next page.

Turn ON the TCU

- 1. Got back to the Home screen, and then follow steps 9-13 starting on page 4 to get to Figure 32 below.
- 2. Select **On**.
- 3. Select **End**, and then wait 40 seconds.

CONSULT-III plus Ver.	VIN:-	Vehicle : -	Ce	untry : U.S.A		
*1	Screen Capture	See of the second	11 V VI M	•		
Diagnouis (One Dys	tem Selection 🕨 TELE	MATICS				
Work support : TCU ACTIVATE SE	TTING					
Change TCU activate setting.				Off	Г	
			[On		Step 2
Current status			Off	Start		
			ĺ	End		Step
TP180535						3

Figure 32

- 4. Close C-III plus.
- 5. Turn the ignition OFF (turn OFF "Ready" mode).
- 6. Disconnect the plus VI from the vehicle.

CLAIMS INFORMATION

Submit a "CM" line claim using the following claims coding:

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
Reprogram TCU	(1)	PC6430	ZZ	99	0.3

(1) Reference FAST and use the Telematic Box (283B0-****) part number as the PFP.